Medical Laboratory Technology

Degree Type

Associate of Technical Science Degree

Many opportunities await those choosing careers in medicine and science. One of the most rewarding is medical laboratory technology. As members of the medical team, technicians work side-by-side with medical laboratory scientists and pathologists and have limited contact with patients. Medical laboratory technicians (MLTs) perform a great variety of scientific laboratory procedures that aid in the detection, diagnosis and treatment of disease, and they perform phlebotomy. This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) (www.naacls.org, 5600 North River Road, Suite 720, Rosemont, IL 60018. Phone: 773-714-8880).

In addition to employment in medical laboratories, graduates pursue positions in research, industry or veterinary laboratories, and as medical supply and equipment sales specialists.

The MLT program is broken up by year (first year and second year). Entry into the second year is on a competitive basis. Applications to the second year are accepted every spring, and students are qualified to apply if they are on track to complete all first year classes by the start of the second year (which starts every summer quarter). During the first year, students will take general education courses and specialized medical laboratory courses designed to provide a solid base for the second year of on-the-job training. The second year consists mostly of on-site training in medical laboratories, plus theory courses. Travel to distant training facilities may be required, and work on a variety of shifts may be necessary; therefore, the use of an automobile is required. Access to an up-to-date computer and a reliable internet connection are required. A GPA of 2.0 ("C") or better is required in all MLT program courses.

As a result of completing the MLT program, students will obtain a background in general college courses, especially the sciences, and develop the important employable skills required to perform medical laboratory testing.

The regional program includes training at distant sites in Omak, Walla Walla, Moses Lake, Pendleton, OR and Lewiston, ID

Suggested Course Sequence: Associate of Technical Science Degree Program

First year coursework must be completed before starting the second year coursework. Refer to the first year checklist on the MLT website for more details, www.wvc.edu/mlt.

Some courses have prerequisites. See the course descriptions for more information. Content delivery between campuses may include instructions via online.

Total Credits 123

Course Sequencing

First Year - On Campus

Course ID	Title	Credits
CHEM& 121	Introduction to Chemistry	5.0
CHEM& 131	Introduction to Organic/Biochemistry	5.0
BIOL& 241	Human Anatomy & Physiology I	5.0
BIOL& 242	Human Anatomy & Physiology II	5.0
BIOL& 260	Microbiology	5.0
ENGL& 101	Composition: General	5.0
PSYC& 100	General Psychology	5.0
	CMST& 101 or CMST& 210 or CMST& 220	5.0
HLTH 123	Medical Terminology	3.0
	MA 113 Universal Precautions and Bloodborne Pathogens	
MLT 100	Introduction to Medical Laboratory Technology	1.0
MLT 102	Phlebotomy	1.0

Second Year - On and Off Campus

Summer Quarter (Wenatchee campus)

Course ID	Title	Credits
MLT 150	Basic Lab Theory	5.0
MLT 151	Basic Lab Practice & Phlebotomy	3.0

Fall Quarter

Course ID	Title	Credits
MLT 210	Clinical Experience I	10.0
MLT 213	Hematology	7.0
MLT 214	Hematology Lab	3.0

Winter Quarter

Course ID	Title	Credits
MLT 220	Clinical Experience II	10.0
MLT 223	Clinical Microbiology	7.0
MLT 224	Clinical Microbiology Lab	3.0

Spring Quarter

Course ID	Title	Credits
MLT 230	Clinical Experience III	10.0
MLT 233	Clinical Chemistry and Urinalysis	7.0
MLT 234	Clinical Chemsitry Lab	3.0

Summer Quarter

Course ID	Title	Credits
MLT 240	Clinical Experience IV	10.0

CHEM& 121, ENGL& 101: Placement score required.

Selection to the second year of the program:

Applications to the second year are accepted every spring, and students are qualified to apply if they are on track to complete all first year classes (also called prerequisites) by the start of the second year (which starts every summer quarter). Students must successfully complete first year courses before being permitted to continue with the second year of the program. An interview and letters of recommendation may be a part of the acceptance criteria. The number of positions available in the second year is dependent on the number of clinical training sites available, and therefore competitive.

Application Requirements:

- Complete the WVC Application for Admission.
- Complete the appropriate MLT application for Wenatchee or a distant site.
- Submit three recommendation forms, if required. Recommendation form is online at wvc.edu/MLT.
- Provide official college transcripts (excluding WVC transcripts).
- Demonstrate a cumulative college GPA of 2.5 or higher.
- Complete one of the following: MATH 99 Intermediate Algebra or higher or placement into MATH& 107 Math in Society or higher.
- Complete all first year coursework with a grade of "C" (2.0) or higher no later than the spring quarter before the second year of the program begins.
- CHEM& 121 Intro. to Chemistry
- CHEM& 131 Intro. to Organic/Biochemistry
- BIOL& 241 Human Anatomy & Physiology 1
- BIOL& 242 Human Anatomy & Physiology 2
- BIOL& 260 Microbiology
- ENGL& 101 Composition: General
- One of the following: CMST& 101 Introduction to Communication, CMST& 210 Interpersonal Communication or CMST& 220 Public Speaking
- MA 113 Universal Precautions and Bloodborne Pathogens
- HLTH 123 Medical Terminology
- PSYC& 100 General Psychology
- MLT 100 Intro. to Medical Laboratory Technology
- MLT 102 Phlebotomy

Note: Conviction of certain crimes may prevent completion of the clinical course requirements of the program and may prevent future employment in the healthcare field. A criminal record check is required prior to any clinical training experience or clinical field trips. Students who have a criminal record should meet with the dean of allied health to determine if the criminal history would prevent access to a healthcare facility.

Students with a bachelor's degree should visit the MLT Admission website at www.wvc.edu/mlt for special admission requirements.

Immediately following acceptance to an allied health program students must fulfill the following requirements:

• Pay a non-refundable acceptance fee by the designated deadline.

- Provide a current healthcare provider CPR card. Must include but not be limited to first aid/CPR/AED for adult, children and infants. The CPR card must be issued by a person or facility qualified specifically to instruct CPR for healthcare providers.
- Provide documentation of a two-step PPD (two separate tuberculin skin tests placed one to three weeks apart) and Hepatitis B vaccinations. Both must include vaccine lot numbers.
- Provide a copy of seven contact hour course Washington State HIV/AIDS Certificate. (Seven-hour online class
 offered through www.nursingceu.com or any other seven-hour HIV/AIDS class.)
- Provide documentation of immunizations to the student immunization tracker (for a complete list go to www.wvc.edu/alliedhealth).
- Successfully pass a national background check through Complio and a DSHS background check. Certain crimes can disqualify students from attending clinical sites. Please contact the Allied Health department at 509-682-6660 with questions.
- Provide results of a ten-panel drug test, not older than 45 days, from Complio.
- Complete the allied health packet, which includes: student disclosure form, a child and adult abuse information act disclosure statement, medical record form, student release form and student confidentiality form.
- Liability insurance is calculated into tuition and fees annually at the time of registration.

Note: Required documents are to be submitted to the student immunization tracker.

Program outcomes

Upon successful completion of the Medical Laboratory Technician program, the student should be able to:

- Perform routine clinical laboratory procedures, including quality control, on biological specimens in the areas of Hematology, Hemostasis, Immunohematology, Clinical Chemistry, Microbiology, Serology and Urinalysis under the supervision of a medical laboratory scientist or pathologist.
- Relate laboratory findings to common disease processes.
- Demonstrate knowledge of laboratory safety, standard precautions, HIPAA, and other laboratory standards necessary to protect themselves and others.
- Apply critical thinking and problem-solving techniques to identify and correct procedural and instrument errors, and verify the accuracy of laboratory results obtained.
- Demonstrate effective communication skills to serve the needs of patients, the public, and all members of the health care team.

Regional MLT Program

The entire two years of the program need not be taken on the Wenatchee campus. Most, if not all, of the program can be competed in Omak, Moses Lake, Walla Walla, Pendleton, OR or Lewiston, ID.

During the second year of the program, students from Omak and Moses Lake must join with all the Wenatchee students and take MLT 150 and 151 on the Wenatchee campus. Other areas are able to take all required courses totally within their regional area and are not required to take any courses in Wenatchee. Clinical training during the second year is available in medical laboratories in the areas surrounding each area where the program is available. The lectures (MLT 213, 223 and 233) and labs (MLT 214, 224 and 234) during the second year are taught by the use of either online materials or in live interactive TV classrooms. Registration for the final five quarters is only through WVC. At the conclusion of the program students will be qualified to take a national certifying examination (ASCP or BOC).

For more information, visit <u>www.wvc.edu/mlt</u>. Specific information regarding application to the program is available on this site as well.

CMST& 101 or CMST& 210 or CMST& 220

Elective Credits 5.0

Course ID	Title	Credits
CMST& 101	Introduction to Communication	5.0
CMST& 210	Interpersonal Communication	5.0
CMST& 220	Public Speaking	5.0

MA 113 Universal Precautions and Bloodborne Pathogens

HIV/AIDS certificate of completion is required for all students except students in the Oregon program. This is a non-credit requirement.

Course ID	Title	Credits
MA 113	Universal Precautions and Bloodborne Pathogens	1.0